AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listing of claims in the application:

LISTING OF CLAIMS:

1. (Currently amended) A keyboard having a user programmable input apparatus ~~with a keyboard~~, comprising:

a plurality of keys disposed thereon ~~the keyboard~~ for input operations;

a microprocessor coupled to the plurality of keys for receiving an input therefrom ~~the plurality of keys~~;

a nonvolatile memory coupled to the microprocessor and programmable by operating the plurality of keys; and

a transmission arrangement connected to the microprocessor for outputting data external to ~~outside of the input apparatus~~ the keyboard;

wherein the plurality of keys includes a set of special control keys programmable to simulate a cursor control device, the set of special control keys being programmable to have a different report rate from that of the other of the plurality of keys to coincide with requirements of a cursor control device.

2. (Currently amended) The ~~input apparatus~~ keyboard of claim 1, wherein the microprocessor and nonvolatile memory are integrated in a single chip.

3. (Currently amended) The ~~input apparatus~~ keyboard of claim 1, wherein the nonvolatile memory is programmed with a user programmable password.

4. (Currently amended) The ~~input apparatus~~ keyboard of claim 1, wherein the nonvolatile memory is programmed with a user programmable hot key.

5. (Currently amended) The ~~input apparatus~~ keyboard of claim 1, wherein the nonvolatile memory is programmed with a user programmable data.

6. (Currently amended) The ~~input apparatus~~ keyboard of claim 3, wherein the plurality of keys include a ~~special~~ key to program the password.

7. (Currently amended) The ~~input apparatus~~ keyboard of claim 4, wherein the plurality of keys include a ~~special~~ key to program the hot key.

8. (Currently amended) The ~~input apparatus~~ keyboard of claim 5, wherein the plurality of keys include a ~~special~~ key to program the data.

9. (Currently amended) The ~~input apparatus~~ keyboard of claim 1, wherein the plurality of keys include a ~~special~~ key to initialize a programming procedure of the nonvolatile memory.

10. (Currently amended) The ~~input apparatus~~ keyboard of claim 1, wherein the cursor control device simulated by the set of ~~plurality of keys include~~ [[a]] special control keys is ~~to simulate~~ a mouse.

11. (Currently amended) The ~~input apparatus~~ keyboard of claim 1, wherein the cursor control device simulated by the set of ~~plurality of keys include~~ [[a]] special control keys is ~~to simulate~~ a joystick.

12. (Cancelled).

13. (Currently amended) The ~~input apparatus~~ keyboard of claim 1, wherein ~~the plurality~~ at least one of the set of special control keys ~~include a special key~~ is programmable to simulate one of the other of the plurality of keys.

14. (Currently amended) The ~~input apparatus~~ keyboard of claim 13, wherein the ~~special control~~ the at least one special control key has a predetermined report rate different from that of the ~~simulated~~ key being simulated.

15. (Currently amended) The ~~input apparatus~~ keyboard of claim 1, wherein the plurality of keys are operated to change a key mapping by programming the nonvolatile memory.

16. (Currently amended) The ~~input apparatus~~ keyboard of claim 1, wherein the nonvolatile memory is programmed with a command thereto by operating the plurality of keys.

17 - 21. (Cancelled).

22. (Currently amended) The ~~input apparatus~~ keyboard of claim 1, further comprising a display connected to the microprocessor to display a content stored in the nonvolatile memory.

23. (Currently amended) The ~~input apparatus~~ keyboard of claim 1, further comprising an application software program executing ~~outside~~ external to the ~~input apparatus~~ keyboard to communicate with the ~~input apparatus~~ microprocessor.

24. (Currently amended) The ~~input apparatus~~ keyboard of claim 23, wherein the application software program is used to program the nonvolatile memory.

25. (Currently amended) The ~~input apparatus~~ keyboard of claim 23, wherein the application software program is used to perform a function programmed in the nonvolatile memory.

26. (Currently amended) A method for operating a keyboard having a user programmable ~~an~~ input apparatus ~~with a keyboard~~, the ~~input apparatus~~ keyboard having a microprocessor, a nonvolatile memory and a transmission arrangement, the keyboard having a plurality of keys and at least one special key, the method comprising the steps of:

detecting a trigger signal of a key of the keyboard;

storing a first data into the nonvolatile memory when the trigger signal is a programming signal;

transmitting a normal data corresponding to the trigger signal external to ~~outside of~~ the ~~input apparatus~~ keyboard by the transmission arrangement when the trigger signal is a normal keying signal; ~~and~~

reading a second data corresponding to a programmed key from the nonvolatile memory and/or executing a function corresponding to the second data

when the trigger signal matches the programmed key; and [[.]]

programming the special key to simulate a cursor control device and changing a reporting rate of the special key to be different from that of other of the plurality of keys to coincide with requirements of a cursor control device.